



#5

## SEQUENCE LISTING

### (1) GENERAL INFORMATION:

- (i) APPLICANT: Victoria, Edward J.  
Marquis, David M.  
Jones, David S.  
Yu, Lin
- (ii) TITLE OF INVENTION: aPL IMMUNOREACTIVE PEPTIDES,  
CONJUGATES THEREOF AND METHODS OF TREATMENT FOR aPL ANTIBODY-  
MEDIATED PATHOLOGIES
- (iii) NUMBER OF SEQUENCES: 226
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: MORRISON & FOERSTER LLP
  - (B) STREET: 755 PAGE MILL ROAD
  - (C) CITY: PALO ALTO
  - (D) STATE: CA
  - (E) COUNTRY: USA
  - (F) ZIP: 94304-1018
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 10/044,844
  - (B) FILING DATE: 2002-JAN-10
  - (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: CATHERINE M. POLIZZI
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  - (C) REFERENCE/DOCKET NUMBER: 25231-20061.03
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  - (C) TELEX: 706141

### (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 12 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Pro Cys Leu Leu Leu Ala Pro Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Gly Pro Cys Leu Leu Leu Ala Pro Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Ala Gly Pro Cys Leu Leu Leu Ala Pro Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (D) OTHER INFORMATION: /product= "OTHER"  
/label= MeP; /note= "alpha-methyl proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Ala	Gly	Xaa	Cys	Leu	Leu	Leu	Ala	Pro	Asp	Arg	Cys	Pro	Gly
1				5					10				

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "OTHER"

/label= MeP

/note= "alpha-methyl proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Ala	Gly	Pro	Cys	Leu	Leu	Leu	Ala	Xaa	Asp	Arg	Cys	Pro	Gly
1				5					10				

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: group(3, 9)
- (D) OTHER INFORMATION: /product= "OTHER"

/label= MeP

/note= "alpha-methyl proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Ala	Gly	Xaa	Cys	Leu	Leu	Leu	Ala	Xaa	Asp	Arg	Cys	Pro	Gly
1				5					10				

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Ala Gly Pro Cys Leu Leu Leu Ala Pro Asp Arg Cys Pro Gly  
1                      5                      10

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 4 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Gly Ser Gly Ser  
1

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Cys Leu Leu Leu Ala Pro Asp Arg Cys  
1                      5

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xy
- (B) CLONE: 2101

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Cys Asn Ile Leu Val Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:  
(A) LIBRARY: xyz  
(B) CLONE: 5A12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Cys Leu Ile Leu Ala Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:  
(A) LIBRARY: xyz  
(B) CLONE: 2D7

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Cys Leu Leu Leu Ala Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:  
(A) LIBRARY: xyz  
(B) CLONE: 3B6

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Cys Leu Val Leu Ala Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xyz
  - (B) CLONE: 3E4

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Cys Leu Phe Val Ala Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:15:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xyz
  - (B) CLONE: 3E7

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Cys Ile Leu Leu Ala His Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xyz
  - (B) CLONE: 2H1

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Cys Ile Ile Leu Ala Pro Gly Arg Cys

1

5

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz
- (B) CLONE: 3C10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Cys Ile Leu Leu Ala Lys Asn Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz
- (B) CLONE: 3C5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Cys Ile Val Leu Val Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz
- (B) CLONE: 2F4

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Cys Leu Val Ile Ala Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEO ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz  
(B) CLONE: 5B1

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Cys Trp Phe Arg Ser Gln Ser Ser Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz  
(B) CLONE: 3E11

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Cys Ser Pro Ile Leu Arg Gly Asn Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: xyz  
(B) CLONE: 3E8

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Cys His Lys Phe Phe Trp Leu Thr Cys  
1 5



(2) INFORMATION FOR SEQ ID NO:23:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xy'z
  - (B) CLONE: 2A10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Cys Thr Ile Leu Ala Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:24:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xy'z
  - (B) CLONE: 2G12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Cys Leu Leu Ile Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xy'z
  - (B) CLONE: 2G11

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Cys Leu Leu Ile Thr His Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xy'z
  - (B) CLONE: 2F10
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:
 

Cys Asn Ile Leu Val Leu Asp Arg Cys  
   1                          5
- (2) INFORMATION FOR SEQ ID NO:27:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 9 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY: xy'z
    - (B) CLONE: 2E3
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:
 

Cys Pro Leu Ile Thr His Asp Arg Cys  
   1                          5
- (2) INFORMATION FOR SEQ ID NO:28:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 9 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY: xy'z
    - (B) CLONE: 2D12
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:
 

Cys Leu Val Leu Ala Ala Asp Arg Cys  
   1                          5
- (2) INFORMATION FOR SEQ ID NO:29:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY: xy'z
  - (B) CLONE: 3B10
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:
 

Cys Leu Leu Leu Ala Pro Asp Arg Cys  
   1                  5
- (2) INFORMATION FOR SEQ ID NO:30:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 9 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY: xy'z
    - (B) CLONE: 3F2
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:
 

Cys Phe Phe His Phe Asp His Ser Cys  
   1                  5
- (2) INFORMATION FOR SEQ ID NO:31:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 9 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY: xy'z
    - (B) CLONE: 2D3
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:
 

Cys Pro Leu His Thr His His Thr Cys  
   1                  5
- (2) INFORMATION FOR SEQ ID NO:32:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: G11

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Cys Thr Ile Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: 2H5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Cys Thr Ile Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: 2H2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

Cys Thr Ile Leu Thr Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: 2H10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

Cys Thr Leu Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: 2E10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

Cys Ile Gln Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: Custom (X) 6
- (B) CLONE: 1B7

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

Cys His Leu Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid

(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
(A) LIBRARY: Custom (X) 6  
(B) CLONE: 2H1

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

Cys Leu Ile Leu Thr Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
(A) LIBRARY: Custom (X) 6  
(B) CLONE: 2H12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

Cys Ser Ile Leu Ala Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
(A) LIBRARY: Custom (X) 6  
(B) CLONE: 1A4

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

Cys Asn Leu Leu Ala Leu Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: Custom (X) 6

(B) CLONE: 2H6

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

Cys Asn Leu Leu Ala Ile Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: Custom (X) 6

(B) CLONE: 1C3

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

Cys Leu Leu Leu Ala Ile Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: Custom (X) 6

(B) CLONE: 1D10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

Cys Thr Ile Ile Thr Gln Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
    (A) LIBRARY: Custom (X)6  
    (B) CLONE: 2H4

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

Cys Asn Ile Ile Thr Arg Asp Arg Cys  
1                                    5

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
    (A) LIBRARY: Custom (X)6  
    (B) CLONE: 2G12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Cys Ile Leu His Ala Ala His Arg Cys  
1                                    5

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
    (A) LIBRARY: Custom (X)6  
    (B) CLONE: 1A9

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

Cys Ser Ser Lys Ser Tyr Trp Arg Cys  
1                                    5

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear



(vii) IMMEDIATE SOURCE:  
 (A) LIBRARY: xy'z  
 (B) CLONE: 4B11

(xi) SEQUENCE DESCRIPTION: SEO ID NO:47:

Cys Gly Asn Ala Ala Asp Ala Arg Cys  
1 5

(2) INFORMATION FOR SEO ID NO:48:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
 (A) LIBRARY: xy'z  
 (B) CLONE: 4D3

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

Cys Thr Asn Trp Ala Asp Pro Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
 (A) LIBRARY: xy'z  
 (B) CLONE: 4C7

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

Cys Gly Asn Ile Ala Asp Pro Arg Cys  
1 . 5

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: xy'z  
(B) CLONE: 4G7

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

Cys Thr Asn Leu Thr Asp Ser Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:  
(A) LIBRARY: xy'z  
(B) CLONE: 4A2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

Cys Gly Asn Pro Thr Asp Val Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

Gly Ile Leu Leu Asn Glu Phe Ala  
1 5

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

Gly Ile Leu Thr Ile Asp Asn Leu  
1 5

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 8 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

Gly Ile Leu Ala Leu Asp Tyr Val  
1                    5

(2) INFORMATION FOR SEQ ID NO:55:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 12 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

Leu Ser Asp Pro Gly Tyr Val Arg Asn Ile Phe His  
1                    5                    10

(2) INFORMATION FOR SEQ ID NO:56:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 15 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

Leu Thr Asp Pro Arg Tyr Thr Arg Asp Ile Ser Asn Phe Thr Asp  
1                    5                    10                    15

(2) INFORMATION FOR SEQ ID NO:57:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 14 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

Ala Gly Pro Cys Leu Gly Val Leu Gly Lys Leu Cys Pro Gly  
1                    5                    10

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

Cys Leu Ile Leu Ala Pro Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

Ala Gly Pro Cys Leu Gly Val Leu Gly Lys Leu Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:61:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 13 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

Gly	Pro	Cys	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys	Pro	Gly
1				5					10			

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 12 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

Pro	Cys	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys	Pro	Gly
1				5					10		

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 11 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

Cys	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys	Pro	Gly
1				5					10	

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 13 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

Ala	Gly	Pro	Cys	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## (2) INFORMATION FOR SEQ ID NO:65:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

## (2) INFORMATION FOR SEQ ID NO:66:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

## (2) INFORMATION FOR SEQ ID NO:67:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc

/note= "Homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

Xaa Leu Gly Val Leu Gly Lys Leu Cys

1

5

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc

/note= "Homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

Cys Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: group(1, 9)
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc

/note= "Homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

Cys Ala Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

Cys Leu Ala Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

Cys Leu Gly Ala Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

Cys Leu Gly Val Ala Gly Lys Leu Cys



## (2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

Cys Leu Gly Val Leu Ala Lys Leu Cys  
1 5

## (2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

Cys Leu Gly Val Leu Gly Ala Leu Cys  
1 5

## (2) INFORMATION FOR SEQ ID NO:76:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

Cys Leu Gly Val Leu Gly Lys Ala Cys  
1 5

## (2) INFORMATION FOR SEQ ID NO:77:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid

(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

Cys Gly Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

Cys Leu Gly Gly Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

Cys Leu Gly Val Gly Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

Cys Leu Gly Val Leu Gly Gly Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

Cys Leu Gly Val Leu Gly Lys Gly Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

Cys Ile Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

Cys Val Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids

(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

Cys Met Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 2  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Cy  
/note= "cyclohexyl alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 2  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= tL  
/note= "tertiary leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "OTHER"

/label= mL

/note= "alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Iv

/note= "alpha-methyl, alpha amino butyric acid"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

Cys Leu Gly Leu Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:90:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

Cys Leu Gly Ile Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:91:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

Cys Leu Gly Met Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:92:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(B) LOCATION: 4  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Cy  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 4  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= tL  
/note= "tertiary leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 4  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= mL  
/note= "alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys

1

5

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 4
- (D) OTHER INFORMATION: /product= "OTHER"  
/label= Iv  
/note= "alpha-methyl, alpha-amino butyric acid"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

Cys Leu Gly Val Ile Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:



Cys Leu Gly Val Val Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:98:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

Cys Leu Gly Val Met Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:99:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
  - (B) LOCATION: 5
  - (D) OTHER INFORMATION: /product= "OTHER"
- /label= Cy  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:100:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= tL  
/note= "tertiary leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= mL  
/note= "alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Iv  
/note= "alpha-methyl, alpha-amino butyric acid"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:103:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

Cys Leu Gly Val Leu Gly Lys Ile Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:104:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

Cys Leu Gly Val Leu Gly Lys Val Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

Cys Leu Gly Val Leu Gly Lys Met Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 8
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Cy

/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 8
- (D) OTHER INFORMATION: /product= "OTHER"

/label= tL

/note= "tertiary leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(B) LOCATION: 8  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= mL  
/note= "alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 8  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Iv  
/note= "alpha-methyl, alpha-amino butyric acid"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

Cys Leu Pro Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid

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        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: Modified-site
    (B) LOCATION: 3
    (D) OTHER INFORMATION: /product= "OTHER"
/label= mP
/note= "alpha-methyl proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

    Cys Leu Xaa Val Leu Gly Lys Leu Cys
    1             5

(2) INFORMATION FOR SEQ ID NO:112:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 9 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (ix) FEATURE:
        (A) NAME/KEY: Modified-site
        (B) LOCATION: 3
        (D) OTHER INFORMATION: /product= "OTHER"
/label= mA
/note= "alpha-methyl alanine"

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

    Cys Leu Xaa Val Leu Gly Lys Leu Cys
    1             5

(2) INFORMATION FOR SEQ ID NO:113:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 9 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (ix) FEATURE:
        (A) NAME/KEY: Modified-site
        (B) LOCATION: 3

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(D) OTHER INFORMATION: /product= "OTHER"  
/label= cG  
/note= "cyclo-propyl glycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

Cys Leu Xaa Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

Cys Leu Gly Val Leu Pro Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= mP  
/note= "alpha-methyl proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /product= "OTHER"

/label= mA  
/note= "alpha-methyl alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /product= "OTHER"

/label= cG  
/note= "cyclopropyl glycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (D) OTHER INFORMATION: /product= "OTHER"



/label= dA  
/note= "D-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

Cys Leu Xaa Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /product= "OTHER"

/label= dA  
/note= "D-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

Cys Pro Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

Cys Leu Pro Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

Cys Leu Gly Pro Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

Cys Leu Gly Val Pro Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

Cys Leu Gly Val Leu Pro Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:125:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

Cys Leu Gly Val Leu Gly Pro Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:126:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

Cys Leu Gly Val Leu Gly Lys Pro Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:127:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

Cys Leu Xaa Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 4
- (D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 5

(D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 6

(D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 7

(D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

Cys Leu Gly Val Leu Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 8
- (D) OTHER INFORMATION: /product= "OTHER"

/label= pG

/note= "phenylglycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "Aib"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 3  
(D) OTHER INFORMATION: /product= "Aib"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:
- Cys Leu Xaa Val Leu Gly Lys Leu Cys  
1 5
- (2) INFORMATION FOR SEQ ID NO:136:
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 4  
(D) OTHER INFORMATION: /product= "Aib"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:
- Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5
- (2) INFORMATION FOR SEQ ID NO:137:
- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(D) OTHER INFORMATION: /product= "Aib"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 6

(D) OTHER INFORMATION: /product= "Aib"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 7

(D) OTHER INFORMATION: /product= "Aib"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

Cys Leu Gly Val Leu Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear



(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 8

(D) OTHER INFORMATION: /product= "Aib"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

Cys Leu Gly Val Leu Gly Arg Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 7

(D) OTHER INFORMATION: /product= "Orn"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

Cys Leu Gly Val Leu Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "OTHER"

/label= mK

/note= "N-epsilon-methyl lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

Cys	Leu	Gly	Val	Leu	Gly	Xaa	Leu	Cys
1				5				

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dP

/note= "D-proline"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

Xaa	Cys	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys
1				5				10	

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(B) LOCATION: 2  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 4  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dV  
/note= "D-valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

Cys Leu Gly Val Xaa Gly Lys Leu Cys

1

5

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dK

/note= "D-lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

Cys Leu Gly Val Leu Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 8
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dL

/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dL  
/note= "D-leucine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 4
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dV  
/note= "D-valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

Cys Xaa Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: group(2, 4)
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dV  
/note= "D-valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

Cys Xaa Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: group(2, 4)

(D) OTHER INFORMATION: /product= "OTHER"

/label= dL

/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

Cys Xaa Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 4

(D) OTHER INFORMATION: /product= "OTHER"

/label= dV

/note= "D-valine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 5

(D) OTHER INFORMATION: /product= "OTHER"

/label= dL

/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

Cys Leu Gly Xaa Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 5

(D) OTHER INFORMATION: /product= "OTHER"

/label= dV

/note= "D-valine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 4

(D) OTHER INFORMATION: /product= "OTHER"

/label= dL

/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

Cys Leu Gly Xaa Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: group(4, 5)

(D) OTHER INFORMATION: /product= "OTHER"

/label= dV

/note= "D-valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

Cys Leu Gly Xaa Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: group(4, 5)  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

Cys Leu Gly Xaa Xaa Gly Lys Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 5  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 7  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

Cys Leu Gly Val Xaa Gly Xaa Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide



(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 7  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 5  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

Cys Leu Gly Val Xaa Gly Xaa Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: group(5, 7)  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

Cys Leu Gly Val Xaa Gly Xaa Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: group(5, 7)  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

Cys Leu Gly Val Xaa Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 7  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 8  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

Cys Leu Gly Val Leu Gly Xaa Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site

(B) LOCATION: 8  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 7  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

Cys Leu Gly Val Leu Gly Xaa Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: group(7, 8)  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dK  
/note= "D-lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

Cys Leu Gly Val Leu Gly Xaa Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: group(7, 8)

(D) OTHER INFORMATION: /product= "OTHER"  
/label= dL  
/note= "D-leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

Cys Leu Gly Val Leu Gly Xaa Xaa Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dA  
/note= "D-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 9  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dC  
/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

Cys Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= nC

/note= "N-alpha-methyl cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

Xaa Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /product= "OTHER"

/label= nL

/note= "N-alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

Cys Xaa Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 3

(D) OTHER INFORMATION: /product= "OTHER"

/label= nG

/note= "N-methyl glycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

Cys Leu Xaa Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 4

(D) OTHER INFORMATION: /product= "OTHER"

/label= nV

/note= "N-alpha-methyl valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

Cys Leu Gly Xaa Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 5

(D) OTHER INFORMATION: /product= "OTHER"

/label= nL

/note= "N-alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

Cys Leu Gly Val Xaa Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /product= "OTHER"

/label= nG

/note= "N-methyl glycine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

Cys Leu Gly Val Leu Xaa Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "OTHER"

/label= nK

/note= "N-alpha-methyl lysine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

Cys Leu Gly Val Leu Gly Xaa Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 8  
 (D) OTHER INFORMATION: /product= "OTHER"  
 /label= nL  
 /note= "N-alpha-methyl leucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

Cys Leu Gly Val Leu Gly Lys Xaa Cys  
 1 5

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 9  
 (D) OTHER INFORMATION: /product= "OTHER"  
 /label= nC  
 /note= "N-alpha-methyl cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

Cys Leu Gly Val Leu Gly Lys Leu Xaa  
 1 5

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

Cys Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dC

/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

Cys Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1
  - (D) OTHER INFORMATION: /product= "OTHER"
- /label= dC  
/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

Xaa Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
  - (B) LOCATION: group(1, 9)
  - (D) OTHER INFORMATION: /product= "OTHER"
- /label= dC  
/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1  
 (D) OTHER INFORMATION: /product= "OTHER"  
 /label= Hc  
 /note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

Xaa Leu Gly Val Leu Ala Lys Leu Cys  
 1 5

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 8 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1  
 (D) OTHER INFORMATION: /product= "OTHER"  
 /label= Hc  
 /note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

Xaa Gly Val Leu Ala Lys Leu Cys  
 1 5

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 8 amino acids  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

Xaa Leu Val Leu Ala Lys Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 8 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

Xaa Leu Gly Leu Ala Lys Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 8 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

Xaa Leu Gly Val Ala Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:187:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

Xaa Leu Gly Val Leu Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

Xaa Leu Gly Val Leu Ala Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc

/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

Xaa	Leu	Gly	Val	Leu	Ala	Lys	Cys
1				5			

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc

/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

Xaa	Val	Leu	Ala	Lys	Leu	Cys
1				5		

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

Xaa Leu Ala Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 5 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

Xaa Leu Ala Lys Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 9

(D) OTHER INFORMATION: /product= "OTHER"  
/label= Pe  
/note= "penicillamine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 9  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= dPe  
/note= "D-penicillamine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"



/label= Pe  
/note= "penicillamine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

Xaa	Leu	Gly	Val	Leu	Gly	Lys	Leu	Xaa
1				5				

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /product= "OTHER"

/label= dPe  
/note= "D-penicillamine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "OTHER"

/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

Xaa	Leu	Gly	Val	Leu	Gly	Lys	Leu	Xaa
1				5				

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: group(1, 9)

(D) OTHER INFORMATION: /product= "OTHER"

/label= dPe

/note= "D-penicillamine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

Xaa	Leu	Gly	Val	Leu	Gly	Lys	Leu	Xaa
1				5				

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 1

(D) OTHER INFORMATION: /product= "OTHER"

/label= dHc

/note= "D-homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

Xaa	Leu	Gly	Val	Leu	Gly	Lys	Leu	Cys
1				5				

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 1

(D) OTHER INFORMATION: /product= "OTHER"

/label= dHc

/note= "D-homocysteine"

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 9  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dC  
/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1                    5

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 9  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= dC  
/note= "D-cysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1                    5

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= By  
/note= "butyroyl"

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 9  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1                    5

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
    (A) NAME/KEY: Modified-site  
    (B) LOCATION: 1  
    (D) OTHER INFORMATION: /product= "OTHER"  
/label= By  
/note= "butyroyl"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

Xaa Leu Gly Val Leu Gly Lys Leu Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Pp  
/note= "propionyl"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 9  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Pp  
/note= "propionyl"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

Xaa Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: Modified-site

(B) LOCATION: 1  
(D) OTHER INFORMATION: /product= "OTHER"  
/label= Hc  
/note= "homocysteine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

Xaa Leu Gly Val Leu Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

Ser Leu Gly Val Leu Gly Lys Leu Ser  
1 5

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

Cys Leu Gly Val Ala Gly Lys Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

Cys Leu Gly Val Leu Gly Ala Leu Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:209:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 27 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GGGCTGGACC CNNKCCGGGG GCTGCTG  
27

(2) INFORMATION FOR SEQ ID NO:210:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

GGGTCCAGCC CCGT  
14

(2) INFORMATION FOR SEQ ID NO:211:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 10 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

CAGCCCCCGG  
10

(2) INFORMATION FOR SEQ ID NO:212:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 10 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

Gly	Ile	Leu	Ala	Leu	Asp	Tyr	Val	Gly	Gly
1				5					10

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

Gly	Ile	Leu	Thr	Ile	Asp	Asn	Leu	Gly	Gly
1				5					10

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

Gly	Ile	Leu	Leu	Asn	Glu	Phe	Ala	Gly	Gly
1				5					10

(2) INFORMATION FOR SEQ ID NO:215:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 12 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

Gly	Pro	Cys	Leu	Ile	Leu	Ala	Pro	Asp	Arg	Cys	Gly
1				5							10

(2) INFORMATION FOR SEQ ID NO:216:



- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 12 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

Gly Pro Cys Ile Leu Leu Ala Arg Asp Arg Cys Gly  
1                    5                    10

(2) INFORMATION FOR SEQ ID NO:217:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 16 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

Phe Ile Thr Cys Gly Pro Cys Ile Leu Leu Ala Arg Asp Arg Cys Gly  
1                    5                    10                    15

(2) INFORMATION FOR SEQ ID NO:218:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 9 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

Cys Ile Leu Leu Ala Arg Asp Arg Cys  
1                    5

(2) INFORMATION FOR SEQ ID NO:219:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 14 amino acids  
    (B) TYPE: amino acid  
    (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

Ala Gly Pro Cys Leu Leu Leu Ala Pro Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

Ala Gly Pro Asp Asn Ile Ala Asp Pro Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 17 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

Ala Gly Pro Leu Ser Asp Pro Gly Tyr Val Arg Asn Ile Phe His Pro  
1 5 10 15

Gly

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

Gly Ile Leu Ala Leu Asp Tyr Val Gly Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

Ala Gly Pro Ile Leu Leu Ala Arg Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

Ala Gly Pro Cys Leu Ile Leu Ala Pro Asp Arg Cys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

Cys Ala His Pro Asp Trp Asp Arg Cys  
1 5

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1
  - (D) OTHER INFORMATION: /product= "OTHER"
- /label= AF  
/note= "modified Ala of cyclic thioether analog"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
  - (B) LOCATION: 9
  - (D) OTHER INFORMATION: /product= "OTHER"
- /label= AF  
/note= "modified Ala of cyclic thioether analog"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

Xaa Leu Gly Val Leu Gly Lys Leu Xaa  
1 5